

**Agreement of the establishment of postgraduated education
PhD in Innovation Science and Technology**

entered into by

the Rector of Universidade de Aveiro (University of Aveiro) (Portugal), hereafter referred to as UA, represented by Professor Paulo Jorge dos Santos Gonçalves Ferreira,

the Director of the Ecole Nationale Supérieure des Mines de Rabat, previously Ecole Nationale de l'Industrie Minérale (Morocco), hereafter referred to as ENSMR, represented by Professor Mustapha Ouadghiri

the Acting Rector of the Pushchino State Institute of Natural Sciences (PSINS), Pushchino (Russia), hereafter referred to as PSILS, represented by Prof. Dr. M. V. Duljasova

the Rector of the University of Cagliari (Italy), hereafter referred to as UNICA, represented by Professor Maria del Zompo

UA declares

- A. That it is an institution created in 1973 to impart higher Education and to plan and carry out research programs for the purpose of preservation and extension of knowledge, including the awarding of advanced degrees at the B.S., *Licenciatura*, M.S., and PhD levels.
- B. That in order to accomplish its mission, it is organised into the Departamento de Ambiente e Ordenamento (Department of Environment and Planning), Departamento de Biologia (Department of Biology), Departamento de Ciências Médicas (Department of Medical Sciences), Departamento de Ciências Sociais, Políticas e do Território (Department of Social, Political and Territorial Sciences), Departamento de Comunicação e Arte (Department of Communication and Art), Departamento de Economia, Gestão, Engenharia Industrial e Turismo (Department of Economics, Management, Industrial Engineering and Tourism), Departamento de Educação e Psicologia (Department of Education and Psychology), Departamento de Eletrónica, Telecomunicações e Informática (Department of Electronics, Telecommunications and Informatics), Departamento de Engenharia de Materiais e Cerâmica (Department of Material Engineering and Ceramics), Departamento de Engenharia Civil (Department of Civil Engineering), Departamento de Engenharia Mecânica (Department of Mechanical Engineering), Departamento de Física (Department of Physics), Departamento de Geociências (Department of Geosciences), Departamento de Línguas e Culturas (Department of Languages and Cultures), Departamento de Matemática (Department of Mathematics), Departamento de Química (Department of Chemistry), Escola Superior de Design, Gestão e Tecnologias da Produção Aveiro Norte (School of Design, Management and Production Technologies), Escola Superior de Saúde da Universidade de Aveiro (School of Health, University Aveiro), Escola Superior de Tecnologia e Gestão de Águeda (Águeda School of Technology and Management), Instituto Superior de Contabilidade e Administração da Universidade de Aveiro (Aveiro Institute for Accounting and Administration of Aveiro University).
- C. That engineering, science, arts, humanities, business administration, economics and planning, education, communication, fine arts and health, complete the areas in which the University offers a wide range of Undergraduate and Master degrees, as well as several PhD and specialization programmes. At present the University has 14.000 students enrolled, and a teaching staff body of 885 professors. As a modern institution designed for the acquisition of scientific, artistic, and technological knowledge, the Universidade de Aveiro has tried to provide all the conditions and means necessary to develop research both in the University's Departments and in its 20 Teaching and Research Units and 4 Associated Laboratories.
- D. That national and international exchange have also been among the University's main goals. The University sustains the idea that all its students shall have extramural training or some kind of Erasmus-like experience in a national or foreign university. For this reason, the University strongly supports student mobility and training courses, participating in many European Union, Education,

Science and Technology Programmes. That active participation in international education and research programmes is in accord with its internal policy, and that this international dimension is particularly relevant for environmental issues, which have become supra-national, therefore requiring joint development of scientific and technological knowledge, and based on innovative approaches.

PSILS declares

- A. The PSILS is an institution created in 1993 to impart higher Education and to plan and carry out research programs for the purpose of preservation and extension of knowledge, including the awarding of advanced degrees at the M.S., and PhD level.
- B. That in order to accomplish its mission, the PSILS is one of the first universities in Russia to focus on the development of a Master's degree program and to integrate research and education. PSILS now offers more than 20 master's degree programs in biology, environmental protection, soil science, etc. which previously never existed in Russia. As well, PSILS develops Ph.D. education in the mentioned fields. Faculties of the PSILS are based on six research institutes of Russian Academy of Sciences located in Pushchino. The fields of education include the following faculties: Astrophysics, Cell Biology, Biomedical Systems and Technologies, Biophysics, Biomedical Sciences, Histology, Mathematical Modeling, Agrochemistry, General Ecology, Soil Ecology, Biochemistry and Molecular Biology, Microbiology and Biotechnology.
- C. That the last mentioned faculty, Microbiology and Biotechnology, which is located in the Institute of Biochemistry and Physiology of Microorganisms (IBPM), Russian Academy of Sciences, Pushchino (Russia), specialized in microbiology (biodiversity, biochemistry, physiology, genetics) as well in biotechnology and especially in environmental biotechnologies (development of biotechnological processes, ecological monitoring and safety, bioremediation and bio detoxification, selection and construction of microbial strains, etc).
- D. That the IBPM is a research institution of the Russian Academy of Sciences created in 1965. Education and training on the basis of the IBPM include both M.S. and PhD level at the Faculty Microbiology and Biotechnology, PSILS, and the PhD level in the Russian Academy of Sciences educational system.
- E. That the PSILS has active participation in international research and educational programmes in good accordance with its internal policy, and that this international dimension is particularly relevant for environmental issues, which have become supra-national, therefore requiring joint development of scientific and technological knowledge, based on innovative approaches.

UNICA declares

- A. That it is an institution created in 1607 to impart higher education and to plan and carry out research programs for the purpose of preservation and extension of knowledge, including the awarding of advanced degrees at the B.S., M.S., and PhD level.
- B. That in order to accomplish its mission, it is organised into the Departments of Philology, Literature, Linguistics, Physics, Law, Civil, environmental and architectural Engineering, Electrical and electronic Engineering, Mechanical, chemical and materials Engineering, Mathematics and information Technology, Pedagogy, Psychology, Philosophy, Public health, clinical and molecular Medicine, Biomedical Science, Chemical and geological Science, Surgical Science, Environmental and life Science, Economic and business Science, Medical science "Mario Aresu", Social and institutional Science, History, cultural and territorial Heritage.
- C. That the project for the establishment of the International PhD Degree in Environmental Science and Engineering coordinated by Professor Giacomo Cao was approved by the Ministry of the University and the Scientific and Technological Research (MURST) of the Italian Government in the framework of the Three Year Plan 1998 – 2000 indicated as Internationalisation.
- D. That the International PhD Degree in Environmental Science and Engineering has been successfully coordinated since its beginning during the Academic Year 2001/02.
- E. That the International PhD Degree in Environmental Science and Engineering program will be operating until the Academic Year 2014-2015.

- F. That it is of strategic importance to incorporate the International PhD in Environmental Science and Engineering program into the new International PhD in Innovation Science and Technology program that has been established starting from the academic year 2013-2014, where other topics such as Biomedical Engineering, Regenerative Medicine and Materials Science and Engineering will be taken into account.

ENSMR declares

- A. That it is an institution created in 1972 to impart higher Education and to plan and carry out research and continuing education programs for the purpose of preservation and extension of knowledge, including the awarding of advanced degrees at the high engineering and equivalent M.S and PhD levels.
- B. That in order to accomplish its mission, it is organised into the Department of Mining, Department of Earth Sciences, Department of Industrial Process Engineering (Chemical Engineering and Energy Engineering), Department of Electromechanical Engineering, Department of Computer Science, Department of Materials Science, Department of Industrial Engineering.
- C. That active participation in international education and research programs (including Environment) is in accord with its mission, and will join the efforts of the contributing institutions to make this program succeed.

Under the premises:

- A. That the institutions are united by common interests and objectives in academic, scientific and cultural affairs;
- B. That these Institution are the ones which by reason of their essence, ends and objectives are called upon to establish channels of communication that will facilitate intellectual interaction;
- C. That for the above reasons, the Institutions believe it is advantageous to promote their academic ties by entering into an academic, scientific and cultural Cooperation Agreement;
- D. That, because of mutual benefits to the Institutions in the advancement of graduate research and education through the scholarly educational, scientific, technological and cultural contribution of each, it is appropriate and advantageous to the Institutions to enter into this Cooperation Agreement, which as a follow up of previous ones will strength our collaboration and links.

The terms agreed upon are:

Art.1 The objective of the present Agreement is to increase the academic, scientific and cultural relations among UA, UNICA, PSILS, and ENSMR in identified areas, such as Innovation Science and Technology where there is a mutual interest in establishing specific working Cooperation Agreement.

Art. 2 The objective of the present Agreement is to establish a postgraduate education program, e.g. PhD Degree in Innovation Science and Technology jointly awarded by the involved Institutions, according to the applicable laws of each Institution Country.

Art. 3 Under this general Agreement, each institution designate the following employed personnel who will serve as program leaders for the Agreement:

Professor Paulo Jorge dos Santos Gonçalves Ferreira for UA

Professor Roberto Orrù for UNICA

Professor Mostafa Maalmi for ENSMR

Professor M. V. Duljasova for PSILS

Art. 4 The program leaders will be responsible for the developing of a common post graduate education, i.e. a PhD program plan, including a description of the work and activities to be undertaken.

Art. 5 The Agreement obliges, in and of itself, the Institutions to commit the human, material and financial resources required for the execution of the program in accordance with high quality standards.

Art 6. Access to emergency medical care for teacher and graduate students will be based on the health care programs available at the host Institution.

Each Institution will take steps to:

A. Publicise the opportunities available under this Agreement of Cooperation and promote the development of Cooperation;

B. Assist faculty, staff and attendants with the administrative details of interchange

Art 7. The Institutions, under the auspices of this Agreement, may jointly sponsor Conferences, short courses, regular courses, seminars and symposia, as well as exchange publications and other didactic and research materials.

Art. 8 The present Agreement is for three (3) years, and it or any of its parts may be modified or terminated by written consent of all parties who will comply with the obligations, which might be in effect on the date of termination. The involved Institutions undertake to revise the contents of this agreement according to the directives related to the internationalization of PhD programs approved by the institutions Academic Bodies and to comply with the legal obligations of the various Countries, applicable to dual and/or joint degree programs.

Art 9. Regularly employed personnel, while involved in this Agreement of Cooperation, remain subject to the rules and regulations of their own Institution in all matters of employment, benefits, medical and life insurance, employee rights.

The Rector of the Universidade de Aveiro (University of Aveiro) (Portugal)
Paulo Jorge dos Santos Gonçalves Ferreira



11 APR. 2019

The Rector of the University of Cagliari (Italy)
Maria del Zoppo

Maria del Zoppo



19 APR. 2019

The Director of the Higher National School of Mines of Rabat (Morocco)
Mustapha Ouadghiri

Le Directeur de l'École Nationale
Supérieure des Mines de Rabat

Signé : Mustapha OUADGHIRI

12 APR. 2019

The Acting Rector of the Pushchino State Institute of Life Sciences (PSILS), Pushchino (Russia)
M. V. Duljasova



10 APR. 2019